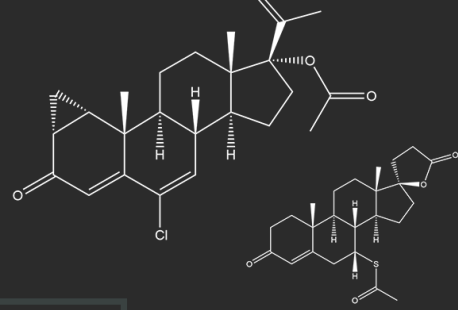


HRT Gen/

Male to Female Guide

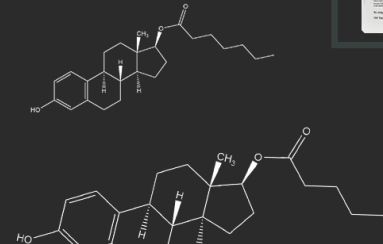
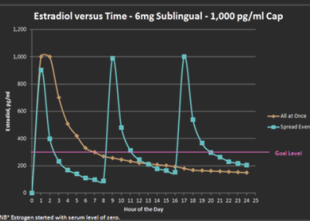
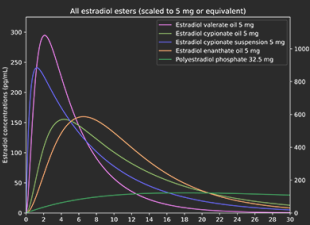
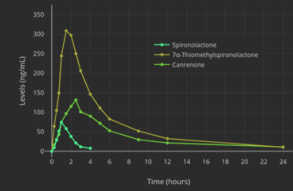
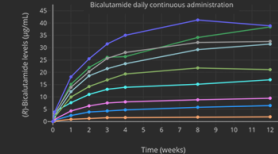
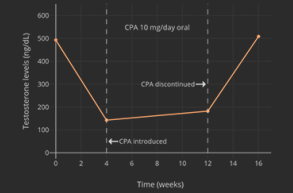
Quickguide v2.51 (2022)



PROCEED WITH CAUTION

These medications can cause serious health problems that you should informed on, alert for, and doing your due diligence in prevention and self-monitoring. Anti-androgens such as **cypro** and **bica** can cause acute, severe, and life threatening liver problems in rare cases. **Spiro** can cause hyperkalemia, which can lead to sudden cardiac arrest. Deep venous thrombosis is a possible risk of estradiol and cypro at higher doses. Any form of estradiol will raise chances of blood clots, but some more than others.

However, the overall risk of HRT is fairly low, if you take responsible doses, self-monitor, do breast self-exams, and be educated/alert for any symptoms that may indicate major health problems. Minimizing or eliminating drug use, drinking, and smoking is a good idea as is maintaining a healthy diet and lifestyle.



HRT OVERVIEW

Hormone Replacement Therapy (HRT) will change your life. The most common way to start is to take both an anti-androgen (AA) and an estrogen (E). The function of the AA is to tell cells to stop acting male, and the function of the estrogen is to tell cells to act female.

The AA is responsible for blocking testosterone (T) from acting on the androgen receptors (ARs) of cells. Some AAs will also damage testosterone production over time, and most but not all will result in lowering testosterone levels. The estrogen will activate estrogen receptors (ERs) in cells, which tells them to become female. When the brain detects higher levels of estrogen it will also start telling the body to produce less testosterone.

The combination of an estrogen and an anti-androgen can have tremendous feminizing effects. The most noticeable of these are skin softening, breast development, reduced body hair, stopping/reversing male pattern baldness, muscle atrophy, and redistribution of body fat into a female shape. These changes can make someone look exceedingly more feminine in the face and body, and in the worst cases only younger looking.

The results of HRT are also heavily dependent on the individual's health, genetics, and age. Different people can have vastly different results from the same treatment. Thus the goal of HRT is to optimize your dose and regimen to fit with your body's individual biology. Knowing the symptoms to watch for and taking blood tests regularly are crucial to ensuring the safest and most effective medical transition possible.

This guide is being provided in the interest of harm reduction, suicide prevention, and promoting responsible HRT. It is not intended to be a substitute for professional medical advice. When taking HRT it is advisable to be under the care of a physician you respect and trust, so that your health can be monitored and so you can get prompt treatment in case of any complications.

1. ANTI-ANDROGEN (AA)

a) CYPROTHERONE ACETATE (CYPRO, CPA)

Dosage: 5-12.5mg/day. Studies have show 10mg to be effective as an AA (50-70% lowered T @10mg/day).

Action: Strong AA. Nukes T production and weakly blocks T.

Due diligence: Doses above 12.5mg are not recommended. Higher doses for prolonged periods are linked to venous thromboembolism and benign brain tumors. May raise prolactin levels. Monitor yourself for pseudo-lactation and monitor prolactin levels via blood tests. Higher doses of 100mg/day are associated with liver toxicity. Cypro is linked to vitamin B12 deficiency. To prevent B12 deficiency you should eat animal products, drink lots of milk, and/or take a B12 supplement to ensure healthy B12 levels.

Info: Effective in reducing general gonad function. Affordable AA.

b) BICALUTAMIDE (Bica)

Dosage: 25-100mg/day. 10-25mg/day will block female T levels which is achieved via estradiol at a sufficient dose.

If not taking estradiol or if you have male levels you will need 50mg/day or more. 100-150mg/day at minimum appears to be needed to fully or near-fully block 600ng/dL T.

Action: Androgen receptor antagonist (blocks androgens). Does not lower T but it does blocks its effects with sufficient dosages.

Due diligence: Avoid if you have a history of liver issues. Low incidence rate of liver level changes, and lower rates of liver toxicity. Issues present themselves in first 3-4mo.

Info: Less effective at reducing general gonad function. More expensive AA. Buildup time for bica to 50% of steady levels is reached after 1 week, about 80-90% steady state levels after 3-4 weeks, and 100% after 6-12 weeks of continuous daily administration.

c) SPIRONOLACTONE (Spiro)

Dosage: 50-200mg/day. At doses of 50-200mg/day spiro is more effective at blocking female T levels levels and less suited at blocking male T levels.

Action: A potassium sparing diuretic that is a weak AA. Weakly blocks production of androgens, and blocks androgens.

Due diligence: Avoid potassium supplements. Avoid if you have kidney issues. Higher doses of spiro is associated with elevated cortisol levels (visceral adiposity), brain fog, and depression.

Info: Makes you pee a lot. Affordable AA. Off-target action with high antimetabolite/corticoid activity and mixed estrogenic and antiestrogenic or SERM-like activity (which has been implicated in having a negative impact on breast development).

d) GnRH AGONISTS (GnRH, GnRHa)

Types: Buserelin, Lupron (euporelin), Goserelin, Triptorelin.

Action: Nukes LH/FSH, thus gonadal androgen production, and causes pituitary to be desensitized to GnRH (GnRH causes release of LH/FSH) with consistent usage.

Info: Great alternatives if they can be obtained affordably, i.e. they are prohibitively expensive for most, and may be available through your GP/endo via insurance/public healthcare.

e) ESTRADIOL MONOTHERAPY (E MONO, E MONOTHERAPY)

Dosage: Estradiol (e2) levels of 200pg/ml suppress T levels by ~90%, and e2 levels between 200-500pg/ml suppress T levels by ~90-95%. This may vary due to capacity for gonads to produce androgens (e.g. T), and therefore your 'monotherapy levels' may differ here (e.g. 90% suppression of 400ng/dL is 'sufficient' as compared to 90% suppression of 700ng/dL).

Action: Lowers LH/FSH via the brain registering it has sex hormones, and via lowering LH/FSH it tells the gonads to stop producing T.

Info: Easily and reliably attainable via injections. Can be attained via patches, gel, or sublingual.

2. ESTROGEN (e)

a) INJECTIONS

Types: Estradiol valerate (EV) is cheap and widely available via prescription. Estradiol cyponate (EC) is more expensive. Estradiol enanthate (EEn) is the longest lasting and is considered the best for injecting every two weeks. EV has higher and faster initial peak that quickly drops off. EC has a lower initial peak, but it lasts longer and gives steadier levels. EEn peaks slower than EC, has slightly higher overall levels, and is similarly steady for levels.

Dosing: Adjust dose based on blood tests. EV is injected at once a week or less. EC & EEn are better for 2 weeks. Check the concentration of the vials. For concentration of 40mg/ml, then you need 0.25ml to get 10mg of estradiol.

Info: Can be done intramuscularly (IM) or subcutaneously (SubQ). Similar efficacy, potency, and levels for each administration method for EC (per studies).

b) TRANSDERMAL

Types: Patches or gels. Patches come in reservoir or matrix forms. Changing patches: reservoir every 3.5 days, matrix every 7 days.

Dosing: Patches start at either 50-100ug, 150-200ug or more is the final dose per your goal levels & labs. 100ug patch is approximately equal to 100pg/ml for levels. Transdermal gel starts at an equivalent dosage. Gel with 0.06% concentration has 1.5mg estradiol in 2.5g gel. Estradiol levels achieved with 1.5mg of estradiol gel are similar to those with a 50ug patch.

Info: Patches are known to leave visible residue after removal. Reservoir patches are known to cause skin reactions (~14-2% occurrence rate). Gel and transdermal application areas do change absorption, and smaller application areas for gel gives higher levels. Application area effectiveness: scrotum > buttocks > stomach > thigh > arm > hand = foot.

c) SUBLINGUAL (sub) & BUCCAL

Types: Estradiol hemihydrate (17-beta estradiol) or estradiol valerate (EV) pills can be used.

Dosing: Start at 2mg/day and later increase to 4-6mg/day. Split doses throughout the day as to maintain steadier levels. 2mg dosing example: 0.5mg/4x day (e.g. 16hr day, every 4hrs take 0.5mg). It is recommended to split your dose =>3/day for more stable levels.

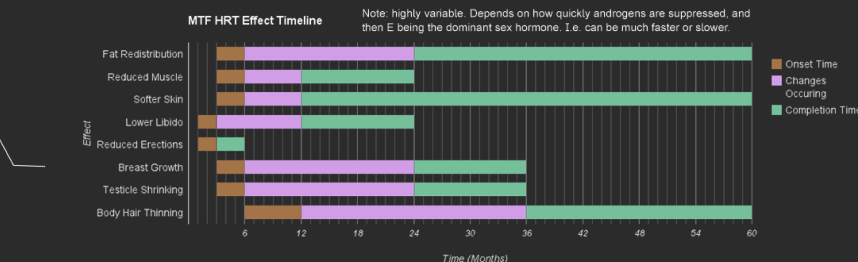
Info: Sublingual administration method is to dissolve under your tongue, and buccal is to dissolve between your cheek and gums. Do not eat or drink while they're dissolving. Wait 10-15min before eating or drinking after the pills have dissolved. Splitting or crushing the pills may help them dissolve faster. This is especially applicable to pills such as progynova (EV) due to the sugar coating.

d) ORAL

Types: Estradiol hemihydrate (17-beta estradiol) or estradiol valerate (EV) pills can be used. 2mg EV is roughly equivalent to 1.5mg estradiol hemihydrate.

Dosing: Start at 2mg/day and later increase to 6-8mg/day. Split doses throughout the day as to maintain steadier levels. 2mg dosing example: 0.5mg/4x day (e.g. 16hr day, every 4hrs take 0.5mg). It is recommended to split your dose =>3/day for more stable levels.

Info: Oral administration method is to swallow the tablets. Significantly raises SHBG levels. 5-10mg/daily boro is recommended to counteract this. Due to lower e2 levels the main consideration when starting on oral e is T suppression. Cypro is more reliable here, and for bica it's recommended to get a pre-hrt blood test (for T) as to determine the proper dosage as to block T.



3. QUICK DOSING GUIDE

MONOTHERAPY DOSING (INJECTIONS)

Use 'injectable estradiol simulator' to refine dose (search it). Example 250pg/ml trough estradiol monotherapy dosages.

ESTER	DOSAGE
EV	5mg/5days or 9mg/week
EC	5mg/week or 15mg/2 weeks
EEn	4mg/week or 14mg/2 weeks

ANTI-ANDROGEN DOSING

These are 'typical' doses for these AAs.

AA	DOSAGE
Cypro	5-12.5mg/day
Bica	50-100mg/day
Spiro	50-200mg/day

SEE DETAILED GUIDE FOR MORE INFO

4. QUICK METHOD GUIDE

After 3 months double estradiol doses. Maximal doses noted in estrogens. Starting on high levels of e2 is associated with slowed breast growth.

After a year, or reaching tanner 3-4, switch to injections (monotherapy dose) + progesterone (200mg rectal).

SEE DETAILED GUIDE FOR MORE INFO.

5. BLOOD TESTS (Labs)

Labs are useful as it's an objective measurement of your hormone levels. Labs are also **very** useful in diagnosing issues and providing assistance.

Trough

Get labs at your trough. Trough means right before your next dose. Trough is important because you can gauge T suppression, your lowest E levels, and if you should adjust your dose.

Lab frequency

Get labs, when starting, at the 3mo mark. While adjusting your dose keep getting labs every 3mo. When your dose is refined, you can bump it to every 6mo-1yr.

Test for (always)

-Estradiol (e2)
-Testosterone (T)
-LH/FSH

Test for (conditional)

-Estrone (e1) - If on oral e
-DHT - If masculinization signs with suppressed T
-AST & ALT (Liver) - If on bica or >=50mg cypro
-SHBG - If goal optimize free e2
-Prolactin - If on cypro
-Potassium - If on spiro

Liver toxicity is dangerous, it can lead to serious complications, and even death. That is, despite low incident rates for bica, if you're on a higher dose of cypro than then get liver levels tested as higher doses are associated with liver toxicity.

Target E levels

E2:E1 ratios: < 1.8 E2:E1 ratios
Free E: >= 1.5%

Target E2 monotherapy levels

200-500 pg/ml
735-1,100 pmol/L
(1pg/mL = 3.671 pmol/L)

Target Total T levels

10-54 ng/dL
0.34-1.87 nmol/L
(1ng/dL = 0.0347 nmol/L)

SEE DETAILED GUIDE FOR MORE INFO

6. ACQUIRING MEDES

The safest way is via your local pharmacy with a doctor's prescription, but this can be very difficult or impossible to option depending on your situation.

Lists of sources are provided in each thread. Since every country is different, e.g. varying strictness of customs, and sources constantly change, please read the thread and ask for help if you need it.

SEE DETAILED GUIDE FOR CUSTOMS INFO

7. STALLED BREAST GROWTH TIPS

Cycle oral e 2-6mg/daily ontop of usual regimen, 3mo on, and 3mo off. Tip is for when you're on e2 injections. Cycle progesterone, 2 weeks on, and 2 weeks off (gel on breasts and/or suppository). You may alter these cycle lengths to your preference.

SEE DETAILED GUIDE FOR MORE INFO

8. FEMINIZING & PREVENTING BREAST GROWTH

Feminization without any breast growth cannot be done with 100% reliability.

Raloxfene, a SERM, is commonly used to stunt, stall, or somewhat reverse breast growth. Ralox will, in conjunction with e2, be a competitive antagonist to e2 when it comes to breast growth (this ralox dosage should out compete e2).

Methods

- Ralox 60-120mg/day (increases serum T/LH/FSH lvls).
- Ralox gel on breasts (2.5-5mg per breast, daily).
- DHT gel on breasts has direct anti-estrogenic action on breast cells and cannot be aromatized to e2 (unlike T).
- Cypro monotherapy has been done, but low sex hormones causes issues (bone mineral density and lacking neurosteroidal action of sex hormones).
- Bica monotherapy has also been done, but heightened T levels will be aromatized into e2 (90% get gynecomastia).
- Do not weight cycle. Similarly, one would want to maintain weight/low healthy BMI. I.e. prevent/lessen breast fat.

Regimens (examples)

- 50mg bica + 12.5mg cypro + 60mg ralox
- 100-150mg bica + aromatase inhibitor + 60mg ralox
- GnRHa + 50mg bica + 60mg ralox + low-mid dose e2

